

# Careers in Action

## Summer Teacher Internship/Lesson Plan Writing Project

This lesson has been endorsed by Mario Garza, Chief Operations Officer, Mission Regional Medical Center

Rene Sanchez	Integrated Physics and Chemistry	Fall 2005
<b>Teacher's Name</b>	<b>Course/Subject</b>	<b>Date(s)/Time</b>

<b>Content</b>	<b>Objective(s)</b> The student will demonstrate the relationship between electric current and magnetism by constructing an electromagnet with 10, 20, and 30, and 40 loops.	<b>Career Concentration(s)</b> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Agricultural Science</td> <td><input type="checkbox"/> Human Dev., Management &amp; Services</td> </tr> <tr> <td><input type="checkbox"/> Art, Communications &amp; Media</td> <td><input type="checkbox"/> Industrial and Engineering</td> </tr> <tr> <td><input type="checkbox"/> Business &amp; Marketing</td> <td><input type="checkbox"/> Personal and Protective Services</td> </tr> <tr> <td><input checked="" type="checkbox"/> Health Science Technology</td> <td></td> </tr> </table>	<input type="checkbox"/> Agricultural Science	<input type="checkbox"/> Human Dev., Management & Services	<input type="checkbox"/> Art, Communications & Media	<input type="checkbox"/> Industrial and Engineering	<input type="checkbox"/> Business & Marketing	<input type="checkbox"/> Personal and Protective Services	<input checked="" type="checkbox"/> Health Science Technology	
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TEKS Reference: 5D,6,6G										
TAKS Reference: Objective 4										

<b>Procedure</b>	<b>Focus/Anticipatory Set</b> Students observe a magnet and Magnetic Resonance Images of the human body.	<b>Bloom's Taxonomy in Lesson</b> <input type="checkbox"/> Knowledge <input type="checkbox"/> Comprehension <input checked="" type="checkbox"/> Application <input checked="" type="checkbox"/> Analysis <input checked="" type="checkbox"/> Synthesis <input type="checkbox"/> Evaluation	<b>Multiple Intelligences</b> <input type="checkbox"/> Linguistic <input checked="" type="checkbox"/> Logical/Math <input type="checkbox"/> Musical <input type="checkbox"/> Spatial <input checked="" type="checkbox"/> Bodily-Kinesthetic <input checked="" type="checkbox"/> Interpersonal <input type="checkbox"/> Interpersonal <input type="checkbox"/> Naturalist	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2"></th> <th colspan="6">SCANS</th> </tr> <tr> <th colspan="2"></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="writing-mode: vertical-rl; transform: rotate(180deg);">Foundation</td> <td>1</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>2</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>3</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td rowspan="5" style="writing-mode: vertical-rl; transform: rotate(180deg);">Competencies</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>3</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			SCANS								A	B	C	D	E	F	Foundation	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Competencies	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
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<b>Relevance/Connection to Workplace</b> M.R.I. is an imaging technique that enables Mission Regional Hospital Radiology Department to produce high quality images of the human body.																																																																														
<b>Instructional Methodology (Activities)</b> <table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> Lecture</td> <td><input checked="" type="checkbox"/> Class/Group Discussion</td> </tr> <tr> <td><input checked="" type="checkbox"/> Teacher Modeling</td> <td><input checked="" type="checkbox"/> Question/Answer</td> </tr> <tr> <td><input checked="" type="checkbox"/> Media Presentation</td> <td><input checked="" type="checkbox"/> Guided Practice</td> </tr> <tr> <td><input type="checkbox"/> Small Group</td> <td><input type="checkbox"/> Independent Practice</td> </tr> </table>	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Class/Group Discussion	<input checked="" type="checkbox"/> Teacher Modeling	<input checked="" type="checkbox"/> Question/Answer	<input checked="" type="checkbox"/> Media Presentation	<input checked="" type="checkbox"/> Guided Practice	<input type="checkbox"/> Small Group	<input type="checkbox"/> Independent Practice	<b>Instructional Material(s)</b> IPC textbook by Glencoe, Chapter 8 Resources Book by Glencoe. www.United Streaming.com																																																																					
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<b>Detail(s) of Instructional Methodology (Activities)</b> Review with student about electromagnetism, Text pgs.233-234. United streaming video clip on magnetism and medical uses of it. Mini Lab: Creating Electromagnets, pgs.13-16,CRB. Students produce a graph with the data, answer questions and draw conclusions on Lab worksheet provided.	<b>Materials/Resources</b> iron bolts, identical, at least 5cm long(4), marking pen, masking tape,BBs, iron, paper clips, small, plastic cups(2), insulated wire, 1.5 -V dry cell battery.																																																																													
<b>Accommodations</b> Modification for special education students, Limited English Proficient, and 504 . Students will be allowed to attend Content Mastery as required.	<b>Use of Technology</b> Computer, overhead and EIKE projectors.																																																																													

<b>Product</b>	<b>Assessment</b> <input checked="" type="checkbox"/> Teacher Evaluation <input type="checkbox"/> Peer/Self Evaluation <input type="checkbox"/> Employer Evaluation <input checked="" type="checkbox"/> Written/Oral Presentation <input type="checkbox"/> Test/Quiz <input type="checkbox"/> Others; _____	<b>Bloom's Taxonomy in Assessment</b> <input type="checkbox"/> Knowledge <input checked="" type="checkbox"/> Analysis <input checked="" type="checkbox"/> Comprehension <input type="checkbox"/> Synthesis <input type="checkbox"/> Application <input type="checkbox"/> Evaluation
	<b>Reteach Activity/Homework</b> Students will research and write on their science journal on other uses of electromagnetism.	<b>Lesson Closure</b> Class discussion on how MRI saves live.